



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,462	06/25/2003	Thaddeus Schroeder	DP-306034	3284

22851 7590 07/19/2006
DELPHI TECHNOLOGIES, INC.
M/C 480-410-202
PO BOX 5052
TROY, MI 48007

EXAMINER

WHITTINGTON, KENNETH

ART UNIT PAPER NUMBER

2862

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,462

Applicant(s)

SCHROEDER ET AL.

Examiner

Kenneth J. Whittington

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,7-9,11,13-17,21-25,27,31,34-39,41 and 46-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,7-9,11,13-17,21-25,27,31,34-39,41 and 47-64 is/are allowed.
- 6) ☒ Claim(s) 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2862

DETAILED ACTION

The Amendment filed May 25, 2006 has been entered and considered. It is also noted the petition to claim priority to the prior application No. 10/356457 has been granted.

6

Allowable Subject Matter

Claims 1-3, 7-9, 11, 13-17, 21-25, 27, 31, 34-39, 41 and 47-64 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 1-3, 7-9, 11, 13-17, 21-25, 27, 31, 34-39
12 and 41, the prior art does not show or teach an array of three sensors, the curve comprising flux density values from each sensor and the width of the target being equal to or narrower than a distance between adjacent sensing elements, in combination with the other features of the claims.

Regarding claims 47-64, they are allowed for the same
18 reasons as outlined in the Office Action mailed December 28, 2005 with respect to the claims from which they were written (note remarks to the Amendment filed 5/25/06).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2862

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35

6 U.S.C. 112:

12 The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 46 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. New claim 46, which is claimed to be prior claim 4 written in independent form, now recites a first and a second target, each having either two magnetic teeth or two magnetic slots. Such a feature is not shown or described in the specification. At most the specification refers to a single target having a pair of magnetic slots or teeth (See FIGS. 9, 10, 12A and 12B). However, there is no disclosure of multiple targets with multiple teeth. Accordingly, the amendment of such

Art Unit: 2862

features into claims constitutes new matter into the claims and specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

6 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 46 is also rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point
12 out and distinctly claim the subject matter which applicant regards as the invention. Regarding this claim, it is noted that the recitations are impossible in some circumstances. This claim recites that the target can only have a width equal to or less than the spacing between adjacent sensors. It then recites the target comprising two teeth with a target spacing and
18 further goes on to state the target spacing is equal to or less than half the distance between the first and last sensor. Because the target itself has a limited width, its two teeth therein and the target spacing are equal to this limited width and no more. However, this claim contemplates a linear array that can have more than 3 sensors, i.e., 5. If the target
24 spacing is half the distance between the first and last sensor, the target spacing would start at the first sensor and extend to

Art Unit: 2862

the third, covering the second sensor. This means the target spacing would be greater than the width between the first and second sensor, and would be internally inconsistent. Accordingly, claim 46 fails to provide a definite scope.

6

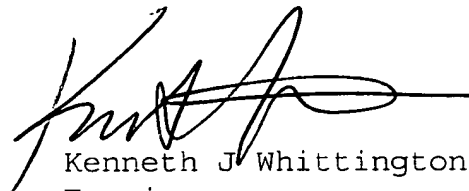
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J. Whittington whose telephone number is (571) 272-2264. The examiner can normally be reached on Monday-Friday, 7:30am-4:00pm.

12 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

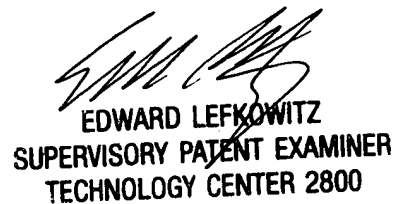
Art Unit: 2862

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kenneth J. Whittington
Examiner
Art Unit 2862

kjw



EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800